Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: USDA-National Animal Disease Center
Facility Location: 2300 Dayton Avenue, Ames, IA 50010
Air Quality Operating Permit Number: 02-TV-001R2-M001
Expiration Date: December 25, 2019

Permit Renewal Application Deadline: June 25, 2019

EIQ Number: 92-5201
Facility File Number: 85-01-017

Responsible Official
Name: Diana Whipple
Title: Deputy Director
Mailing Address: 1920 Dayton Avenue, Ames, IA 50010
Phone #: (515) 337-7285

Permit Contact Person for the Facility
Name: Karla Tebben
Title: Environmental Protection Specialist
Mailing Address: 1920 Dayton Avenue, Ames, IA 50010
Phone #: (515) 337-7026

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

This facility and USDA- National Veterinary Services Laboratory (Facility No. 85-01-056) are considered one source. Two Title V permits are being renewed to these two facilities. This permit is for USDA-National Animal Disease Center and another permit is for USDA- National Veterinary Services Laboratory.

For the Director of the Department of Natural Resources

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Lori Hanson, Supervisor of Air Operating Permits Section Date

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Abbreviations

acfm.....actual cubic feet per minute
CFR.....Code of Federal Regulation
CE .....control equipment
CEM.....continuous emission monitor
^{o}F .....degrees Fahrenheit
EIQ.....emissions inventory questionnaire
EP.....emission point
EU .....emission unit
gr./dscf .....grains per dry standard cubic foot
IAC.....Iowa Administrative Code
IDNR.....Iowa Department of Natural Resources
MVAC.....motor vehicle air conditioner
NAICS.....North American Industry Classification System
NSPS.....new source performance standard
ppmv .....parts per million by volume
lb./hr.....pounds per hour
lb./MMBtu .....pounds per million British thermal units
SCC.....Source Classification Codes
scfm.....standard cubic feet per minute
SIC .....Standard Industrial Classification
TPY .....tons per year
USEPA.....United States Environmental Protection Agency

Pollutants

PM.....particulate matter
PM_{10}.....particulate matter ten microns or less in diameter
SO2 .....sulfur dioxide
NOx.....nitrogen oxides
VOC .....volatile organic compound
CO.....carbon monoxide
HAP.....hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: USDA-National Animal Disease Center
Permit Number: 02-TV-001R2-M001

Facility Description: Noncommercial Research Organization (SIC 8733)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
S-1C	S-1C	Boiler #3	05-A-290-S3
S-4	S-4	Incinerator-Building 4	92-A-045-S6
S-5	S-5	Incinerator-Building 5	95-A-001-S4
S-6	S-6	Paraformaldehyde Vents	
S-7A	S-7A	Combustion Turbine	00-A-579-S3
S-7B	S-7B	Heat Recovery Steam Generator	00-A-580-S2
S-10	S-10	Cleaver Brooks Boiler #1	01-A-843-S4
S-11	S-11	Cleaver Brooks Boiler #2	01-A-844-S4
S-13	S-13	2000 kW Emergency Generator #4	05-A-276-S3
S-14	S-14	2000 kW Emergency Generator #1	05-A-277-S3
S-15	S-15	Boiler #5	06-A-113-S2
S-16	S-16	3.5 MW Combustion Turbine w/ 21.9 MMBtu/hr HRSG	06-A-1149-S2
S-16a			06-A-1308-S2
S-17	S-17	2000 kW Emergency Generator #5	06-A-1150-S2
S-18	S-18	2000 kW Emergency Generator #2	06-A-1151-S2
S-19	S-19	2000 kW Emergency Generator #6	11-A-091
6K GT	6K GT	6,000 gallon Gasoline Tank	NA

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
FO3	1,000 gallon Fuel Oil Tank
FO4	100,000 gallon Fuel Oil Tank
PT2	1,000 gallon Propane Tanks (5)
WELD	Maintenance Welding (8 welders)
PW	Maintenance Parts Washers (3)
FS	Feed Storage Bins (31)
CT	Cooling Tower
LPG Heaters	LPG Comfort Heaters

II. Plant-Wide Conditions

Facility Name: USDA-National Animal Disease Center
Permit Number: 02-TV-001R2-M001

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: Five (5) years from permit issuance
Commencing on: December 26, 2014
Ending on: December 25, 2019

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits
Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to

be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"

III. Emission Point-Specific Conditions

Facility Name: USDA-National Animal Disease Center
Permit Number: **02-TV-001R2-M001**

Emission Point ID Number: S-1C

Associated Equipment

Associated Emission Unit ID Numbers: S-1C

Emission Unit vented through this Emission Point: S-1C
Emission Unit Description: Boiler #3 with low NOx Burner
Raw Material/Fuel: Natural Gas, #2 Fuel Oil
Rated Capacity: 0.045 MMcf/hr, 321.4 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: 567 IAC 23.3(2)"d", DNR Construction Permit 05-A-290-S3

Pollutant: Particulate Matter
Emission Limit(s): 1.41 lb/hr, 0.6 lb/MMBTU
Authority for Requirement: 567 IAC 23.3(2)"b", DNR Construction Permit 05-A-290-S3

Pollutant: Particulate Matter <10 microns (PM_{10})
Emission Limit(s): 0.99 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-290-S3

Pollutant: Sulfur Dioxide (#2 Fuel Oil)
Emission Limit(s): 0.054 lb/MMBTU
Authority for Requirement: DNR Construction Permit 05-A-290-S3

Pollutant: Sulfur Dioxide (Natural Gas)
Emission Limit(s): 0.0006 lb/MMBTU, 500ppmv
Authority for Requirement: 567 IAC 23.3(3)"e", DNR Construction Permit 05-A-290-S3

Pollutant: Nitrogen Oxides (#2 Fuel Oil)
Emission Limit(s): 0.158 lb/MMBTU
Authority for Requirement: DNR Construction Permit 05-A-290-S3

Pollutant: Nitrogen Oxides (Natural Gas)
Emission Limit(s): 0.075 lb/MMBTU
Authority for Requirement: DNR Construction Permit 05-A-290-S3

Pollutant: Nitrogen Oxides
Emission Limit(s): 7.11 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-290-S3

Pollutant: Carbon Monoxide
Emission Limit(s): 0.084 lb/MMBTU
Authority for Requirement: DNR Construction Permit 05-A-290-S3.

(1) An exceedance of the indicator opacity of "10%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

A. This emission unit (Boiler #3) is limited to firing on natural gas and fuel oil #1 or #2. Prior to burning any other fuels, the permittee shall submit an application to the Iowa DNR - Air Quality Bureau to modify this permit.
B. The annual heat input to emission units EU S-1C, EU S-10, EU S-11, and EU S-15, combined, shall not exceed 600,000 MMBtu in any rolling 12-month period.
C. The total amount of fuel oil burned in emission units EU S-1C, EU S-10, EU S-11, and EU S-15, combined, shall not exceed 560,571 gallons in any rolling 12-month period.
D. The sulfur content of the oil burned in the emission unit shall not exceed 0.05 percent by weight. This limit applies at all times, including periods of startup, shutdown and malfunctions.
E. The owner or operator shall operate the emission unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected emission unit indicative of compliance with the opacity standard.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.

A. The owner or operator of this boiler (Boiler #3) shall record and maintain records of the fuels combusted during each calendar month.
B. The owner or operator of this boiler (Boiler #3) shall retain fuel supplier certification of the

sulfur content and heat content of the fuels fired in this boiler.

C. The owner or operator shall maintain the following monthly records:
   i. the total amount of fuel oil burned in the emissions unit (gallons);
   ii. the heat content of the fuel oil burned (Btu/gallons);
   iii. the rolling 12-month total amount of fuel oil burned in the emissions unit (gallons);
   iv. the rolling 12-month total amount of fuel oil burned in emissions units EU S-1C, EU S-10, EU S-11, and EU S-15;
   v. the total amount of natural gas burned in the emissions unit (standard cubic feet)
   vi. the heat input to the emissions unit ; the heat input shall be calculated by using the following equation:

$$HI = [(VOLoil \times HCoil \times 1\ MMBtu/\ 10^6\ Btu) + (VOLng \times HCng \times 1\ MMBtu/\ 10^6\ Btu)]$$

Where:
HI = heat input to the emissions unit (MMBtu)
VOLoil = amount of oil burned in the emissions unit (gallons)
HCoil = heat content of oil, Btu/gallon
VOLng = amount of natural gas burned in the emissions unit (standard cubic feet)
HCng = heat content of natural gas, Btu/scf; and

   vii. the rolling 12-month total heat input to emissions units EU S-1C, EU S-10, EU S-11, and EU S-15 (MMBtu).

D. The permittee shall maintain records required by its standard operating procedures.

Authority for Requirement: DNR Construction Permit 05-A-290-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 46 Feet
Stack Opening, (inches, dia.): 34 Inches
Exhaust Flow Rate (scfm): 6725 scfm
Exhaust Temperature (^oF): 393 degrees F
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-290-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: S-4

Emission Unit vented through this Emission Point: S-4
Emission Unit Description: Building 4 Incinerator
Raw Material/Fuel: Natural Gas
Rated Capacity: 440 lb/hr of waste material

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d", DNR construction permit 92-A-045-S6

Pollutant: Particulate Matter
Emission Limit(s): 1.7 lb/hr, 0.35 gr/dscf
Authority for Requirement: 567 IAC 23.4(12)"a", DNR construction permit 92-A-045-S6

Pollutant: Particulate Matter <10 microns (PM_{10})
Emission Limit(s): 1.7 lb/hr
Authority for Requirement: DNR construction permit 92-A-045-S6

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e", DNR construction permit 92-A-045-S6

Pollutant: Nitrogen Oxides
Emission Limit(s): 2.18 lb/hr
Authority for Requirement: DNR construction permit 92-A-045-S6

(1) An exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing). Visible air contaminants in excess of 60% opacity may be emitted for a period or a period aggregating not more than 3 minutes in any 60 minute period during an operation breakdown or during the cleaning of air pollution control equipment.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

A. This unit shall be fired by natural gas only.
B. This unit is rated at 440 pounds per hour. The unit shall not be overcharged.
C. The waste burned in the unit shall be limited to pathological waste, low-level radioactive waste, chemotherapeutic waste and hospital and medical/infectious waste. Pathological waste is waste material consisting of only human or animal remain, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material and animal bedding. Low-level radioactive waste and chemotherapeutic waste are defined in 40 CFR §60.3078. Hospital waste and medical/infectious waste (HMIW) are defined in 40 CFR §60.51c[1]. Because the rated capacity of this unit is based on burning pathological waste, whenever HMIW is incinerated in the unit, it shall be incinerated at the same time that pathological waste is being incinerated. Prior to burning other types of waste in this unit, the permittee shall notify the Iowa DNR - Air Quality Bureau.
D. The incinerator shall be operated only by personnel who have been properly trained.
E. This unit is a co-fired combustor as defined in 40 CFR §60.51c, and, accordingly, it is restricted to burning a maximum of 10% hospital waste and medical/infectious waste by weight of all waste combusted on a calendar quarter basis. Hospital waste and medical/infectious waste are defined in 40 CFR §60.51c[1]. Pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other" wastes when calculating the percentage of hospital waste and medical/infectious waste combusted in accordance with 40 CFR §60.51c.
F. The incinerator shall be equipped with an interlock system to prevent feeding waste until the secondary combustion chamber temperature has reached a temperature of 1600°F and the primary combustion chamber has reached a temperature of 1400°F.
G. The afterburner shall remain on and maintain a minimum temperature of 1550°F until the waste material has burned down completely.
H. The permittee shall follow its written standard operating procedures for this unit.
I. This emission unit, EU S-4, shall not operate (i.e., hours combusting fuel) more than 3500 hours per rolling twelve-month period.

[1]*The Iowa Administrative Code, 567 IAC 23.1(5)"b"(1), referenced in Iowa DNR construction permit 92-A-045-S6 has been rescinded.*

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.

A. The permittee shall maintain records on the identification of the types of waste charged into the unit.
B. The permittee shall use a non-resettable hour meter to monitor the operating hours of this emission unit.
C. The permittee shall maintain records on the amount of waste charged into the unit. Records shall be on a pounds per hour basis.

D. The owner or operator shall maintain the following monthly records:
    i. the total number of hours that the incinerator operated; and
    ii. the rolling 12-month total number of hours that the incinerator operated.
E. The permittee shall maintain the following records on a calendar quarterly basis:
    i. the amount of hospital waste and medical/infectious waste burned (pounds);
    ii. the total amount of waste burned (pounds); and
    iii. the percentage of hospital waste and medical/infectious waste burned.
F. The permittee shall have equipment that monitors and records the temperature in the primary combustion chamber.
G. Whenever waste material is being burned in the primary chamber, the permittee shall monitor and record the temperature in the secondary combustion chamber continuously.
H. The permittee shall maintain records required by its standard operating procedures.

Authority for Requirement: DNR construction permit 92-A-045-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 53.3 feet
Stack Opening, (inches, dia.): 34.4 inches
Exhaust Flow Rate (scfm): 2700 scfm
Exhaust Temperature (^{o}F): 926 degrees F
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR construction permit 92-A-045-S6

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: S-5

Emission Unit vented through this Emission Point: S-5
Emission Unit Description: Incinerator-Building 5
Raw Material/Fuel: Natural Gas
Rated Capacity: 500 lb/hr of waste material

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d", DNR construction permit 95-A-001-S4

Pollutant: Particulate Matter
Emission Limit(s): 1.2 lb/hr, 0.35 gr/dscf
Authority for Requirement: 567 IAC 23.4(12)"a", DNR construction permit 95-A-001-S4

Pollutant: Particulate Matter < 10 Microns
Emission Limit(s): 1.2 lb/hr
Authority for Requirement: DNR construction permit 95-A-001-S4

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e", DNR construction permit 95-A-001-S4

Pollutant: Nitrogen Oxides
Emission Limit(s): 1.38 lb/hr
Authority for Requirement: DNR construction permit 95-A-001-S4

(1) An exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing). Visible air contaminants in excess of 60% opacity may be emitted for a period or a period aggregating not more than 3 minutes in any 60 minute period during an operation breakdown or during the cleaning of air pollution control equipment.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating limits:

A. This unit shall be fired by natural gas only.
B. This unit is rated at 500 pounds per hour. The unit shall not be overcharged.
C. The waste burned in the unit shall be limited to pathological waste, low-level radioactive waste, chemotherapeutic waste and hospital and medical/infectious waste. Pathological waste is waste material consisting of only human or animal remain, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material and animal bedding. Low-level radioactive waste and chemotherapeutic waste are defined in 40 CFR §60.3078. Hospital waste and medical/infectious waste (HMIW) are defined in 40 CFR §60.51c[1]. Because the rated capacity of this unit is based on burning pathological waste, whenever HMIW is incinerated in the unit, it shall be incinerated at the same time that pathological waste is being incinerated. Prior to burning other types of waste in this unit, the permittee shall notify the Iowa DNR - Air Quality Bureau.
D. The incinerator shall be operated only by personnel who have been properly trained.
E. This unit is a co-fired combustor as defined in 40 CFR §60.51c, and, accordingly, it is restricted to burning a maximum of 10% hospital waste and medical/infectious waste by weight of all waste combusted on a calendar quarter basis. Hospital waste and medical/infectious waste are defined in 40 CFR §60.51c[1]. Pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other" wastes when calculating the percentage of hospital waste and medical/infectious waste combusted in accordance with 40 CFR §60.51c.
F. The incinerator shall be equipped with an interlock system to prevent feeding waste until the secondary combustion chamber temperature has reached a temperature of 1600°F and the primary combustion chamber has reached a temperature of 1400°F.
G. The afterburner shall remain on and maintain a minimum temperature of 1550°F until the waste material has burned down completely.
H. The permittee shall follow its written standard operating procedures for this unit.
I. This emission unit, EU S-5, shall not operate (i.e., hours combusting fuel) more than 3500 hours per rolling twelve-month period.

[1]*The Iowa Administrative Code, IAC 23.1(5)"b"(1), referenced in Iowa DNR construction permit 95-A-001-S4 has been rescinded.*

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.

A. The permittee shall maintain records on the identification of the types of waste charged into the unit.
B. The permittee shall use a non-resettable hour meter to monitor the operating hours of this emission unit.
C. The permittee shall maintain records on the amount of waste charged into the unit. Records shall be on pounds per hour basis.
D. The owner or operator shall maintain the following monthly records:

i. the total number of hours that the incinerator operated; and
ii. the rolling 12-month total number of hours that the incinerator operated.

E. The permittee shall maintain the following records on a calendar quarterly basis:
i. the amount of hospital waste and medical/infectious waste burned (pounds);
ii. the total amount of waste burned (pounds); and
iii. the percentage of hospital waste and medical/infectious waste burned.

F. The permittee shall have equipment that monitors and records the temperature in the primary combustion chamber.

G. Whenever waste material is being burned in the primary chamber, the permittee shall monitor and record the temperature in the secondary combustion chamber continuously.

H. The permittee shall maintain records required by its standard operating procedures.

Authority for Requirement: DNR construction permit 95-A-001-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 46 ft
Stack Opening, (inches, dia.): 24 inches
Exhaust Flow Rate (scfm): 1700 scfm
Exhaust Temperature (^{o}F): 1200 degrees
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR construction permit 95-A-001-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: S-6

Emission Unit vented through this Emission Point: S-6
Emission Unit Description: Paraformaldahyde vents
Raw Material/Fuel: SunPac Mildewcide
Rated Capacity: 0.114 lb/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

No applicable limits at this time.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: S-7A

Emission Unit vented through this Emission Point: S-7A
Emission Unit Description: Combustion Turbine
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.01714MMcf/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: 567 IAC 23.3(2)"d", DNR construction permit 00-A-579-S3

Pollutant: Particulate Matter
Emission Limit(s): 1.5 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a", DNR construction permit 00-A-579-S3

Pollutant: Particulate Matter <10 Microns
Emission Limit(s): 1.5 lb/hr
Authority for Requirement: DNR construction permit 00-A-579-S3

Pollutant: Sulfur Dioxide (Natural Gas)
Emission Limit(s): 0.88 lb/hr, 500 ppmv
Authority for Requirement: 567 IAC 23.1(2)"aa", 567 IAC 23.3 "e", 40 CFR 60 Subpart GG, DNR construction permit 00-A-579-S3

Pollutant: Nitrogen Oxides
Emission Limit(s): 14.28 lb/hr, 0.015% by volume at 15% oxygen on a dry basis
Authority for Requirement: 567 IAC 23.1(2)"aa", 40 CFR 60 Subpart GG, DNR construction permit 00-A-579-S3

Pollutant: Carbon Monoxide (Natural Gas)
Emission Limit(s): 0.12 lb/MMBTU
Authority for Requirement: DNR construction permit 00-A-579-S3

(1) An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. This emission unit (Combustion Turbine #1) is limited to firing on natural gas.

B. This emission unit is limited to operating a maximum of 1500 hours per rolling 12-month period.
   i. The permittee shall use a non-resettable hour meter to monitor the number of hours this emission unit is operated.
   ii. The owner or operator shall maintain the following monthly records:
      a) The total number of hours the emissions unit is operated (hours per month)
      b) The rolling 12-month total number of hours the emissions unit is operated.

C. The permittee shall follow the Custom Fuel Monitoring Schedule for nitrogen and sulfur monitoring that was approved by U.S. EPA Region VII in letters to J. Scott Rusk of the USDA on December 2, 2002, and to Lawayne Nusz on February 27, 2004. These schedules shall satisfy the monitoring requirements of §60.334(b)(2).

Authority for Requirement: DNR construction permit 00-A-579-S3

NSPS Requirements

This emission unit is subject to the requirements of 40 CFR Part 60, Subpart GG, standard of performance for stationary gas turbines.

Authority for Requirement: 567 IAC 23.1(2)"aa", 40 CFR 60 Subpart GG,
DNR construction permit 00-A-579-S3

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 45 feet
Stack Opening, (inches, dia.): 30 inches
Exhaust Flow Rate (scfm): 11,690 scfm
Exhaust Temperature (^{o}F): 900 degrees
Discharge Style: Unobstructed, vertical
Authority for Requirement: DNR construction permit 00-A-579-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: S-7B

Emission Unit vented through this Emission Point: S-7B
Emission Unit Description: Heat Recovery Steam Generator #1
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.0333 MMcf/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: 567 IAC 23.3(2)"d", DNR construction permit 00-A-580-S2

Pollutant: Particulate Matter
Emission Limit(s): 1.0 lb/hr, 0.6 lb/mmBTU
Authority for Requirement: 567 IAC 23.3(2)"b", DNR construction permit 00-A-580-S2

Pollutant: Particulate Matter <10 Microns
Emission Limit(s): 0.5 lb/hr
Authority for Requirement: DNR construction permit 00-A-580-S2

Pollutant: Sulfur Dioxide
Emission Limit(s): 0.02 lb/hr, 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e", DNR construction permit 00-A-580-S2

Pollutant: Nitrogen Oxides
Emission Limit(s): 5.0 lb/hr
Authority for Requirement: DNR construction permit 00-A-580-S2

Pollutant: Carbon Monoxide
Emission Limit(s): 3.0 lb/hr
Authority for Requirement: DNR construction permit 00-A-580-S2

(1) An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

A. This emission unit shall only combust natural gas.
B. This emission unit is limited to operating a maximum of 7000 hours per rolling 12-month period.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.

A. The permittee shall use a non-resettable hour meter to monitor the number of hours this emission unit is operated.
B. The owner or operator shall maintain the following monthly records:
    i. the total number of hours the emissions unit is operated (hours per month); and,
    ii. the rolling 12-month total number of hours the emissions unit is operated.
C. As specified in 40 CFR Part 60 §60.48c(g), the owner or operator of this emission unit shall record and maintain records of the fuels combusted during each calendar month.
D. As specified in 40 CFR Part 60.48c(f), the owner or operator of this emission unit shall retain fuel supplier certification of the sulfur content of the fuels fired in this boiler.

Authority for Requirement: DNR construction permit 00-A-580-S2

NSPS Requirements

This emission unit is subject to 40 CFR, Part 60, Subpart Dc, "Standards of Performance for small Industrial-Commercial-Institutional Steam Generating Units".

Authority for Requirement: 567 IAC 23.1(2)"lll", 40 CFR 60 Subpart Dc,
DNR construction permit 00-A-580-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 46 feet
Stack Opening, (inches, dia.): 30 inches
Exhaust Flow Rate (scfm): 6970 scfm
Exhaust Temperature (^{o}F): 300 degrees
Discharge Style: Unobstructed, vertical
Authority for Requirement: DNR construction permit 00-A-580-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: S-10, S-11

Emission Point	Emission Unit	Emission Unit Description	Raw Material/Fuel	Rated Capacity	Construction Permit
S-10	S-10	Cleaver Brooks Boiler CB 800	#2 Fuel Oil, Natural Gas	0.03348 mmcf/hr	01-A-843-S4
S-11	S-11	Cleaver Brooks Boiler CB 800	#2 Fuel Oil, Natural Gas	0.03348 mmcf/hr	01-A-844-S4

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each of these emission points shall not exceed the levels specified below.

Pollutant: Opacity (#2 Fuel Oil)
Emission Limit(s): 20% as a 6 minute average[(1)], with one instance of not more than 27% over 6 minutes per hour.
Authority for Requirement: 567 IAC 23.1(2)"lll", 40 CFR 60 Subpart Dc,
DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

Pollutant: Opacity (Natural Gas)
Emission Limit(s): 40%[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d", DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.84 lb/hr, 0.6 lb/MMBTU
Authority for Requirement: 567 IAC 23.3(2)"b", DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

Pollutant: Particulate Matter <10 Microns
Emission Limit(s): 0.61 lb/hr
Authority for Requirement: DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

Pollutant: Sulfur Dioxide (#2 Fuel Oil)
Emission Limit(s): 0.054 lb/MMBTU
Authority for Requirement: 567 IAC 23.1(2)"lll", 40 CFR 60 Subpart Dc,
DNR construction permit 01-A-843-S4
DNR construction permit 01-A-844-S4

Pollutant: Sulfur Dioxide (Natural Gas)
Emission Limit(s): 0.0006 lb/MMBTU, 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e", 567 IAC 23.1(2)"lll", 40 CFR 60 Subpart Dc,
DNR construction permit 01-A-843-S4
DNR construction permit 01-A-844-S4

Pollutant: Nitrogen Oxides (#2 Fuel Oil)
Emission Limit(s): 0.158 lb/MMBTU
Authority for Requirement: DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

Pollutant: Nitrogen Oxides (Natural Gas)
Emission Limit(s): 0.108 lb/MMBTU
Authority for Requirement: DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

Pollutant: Nitrogen Oxides
Emission Limit(s): 5.29 lb/hr
Authority for Requirement: DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

Pollutant: Carbon Monoxide
Emission Limit(s): 0.084 lb/MMBTU
Authority for Requirement: DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

(1) An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits (for each of these units):

A. These emission units (Boiler #1 and Boiler #2) are limited to firing on natural gas and fuel oil #1 or #2. Prior to burning any other fuels, the permittee shall submit an application to the Iowa DNR - Air Quality Bureau to modify this permit.
B. The annual heat input to emission units EU S-1C, EU S-10, EU S-11, and EU S-15, combined, shall not exceed 600,000 MMBtu in any rolling 12-month period.

C. The total amount of fuel oil burned in emission units EU S-1C, EU S-10, EU S-11, and EU S-15, combined, shall not exceed 560,571 gallons in any rolling 12-month period.
D. The sulfur content of the oil burned in the emission unit shall not exceed 0.05 percent by weight. This limit applies at all times, including periods of startup, shutdown and malfunctions.
E. The owner or operator shall operate the emission unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected emission unit indicative of compliance with the opacity standard.

Reporting & Record keeping (for each of these units):
The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.

A. As specified in 40 CFR Part 60 §60.48c(g), the owner or operator of these boilers (Boiler #1 and Boiler #2) shall record and maintain records of the fuels combusted during each calendar month.
B. As specified in 40 CFR Part 60.48c(f), the owner or operator of these boilers (Boiler #1 and Boiler #2) shall retain fuel supplier certification of the sulfur content of the fuels fired in this boiler.
C. The owner or operator of these boilers (Boiler #1 and Boiler #2) shall retain fuel supplier certification of the heat content of the fuels fired in this boiler.
D. The owner or operator shall maintain the following monthly records:
    i. the total amount of fuel oil burned in each emissions unit (gallons);
    ii. the heat content of the fuel oil burned (Btu/gallons);
    iii. the rolling 12-month total amount of fuel oil burned in the emissions unit (gallons);
    iv. the rolling 12-month total amount of fuel oil burned in emissions units EU S-1C, EU S-10, EU S-11, and EU S-15;
    v. the total amount of natural gas burned in each emissions unit (standard cubic feet)
    vi. the heat input to each emissions unit ; the heat input shall be calculated by using the following equation:

$$HI = [(VOLoil \times HCoil \times 1\ MMBtu/\ 10^6\ Btu) + (VOLng \times HCng \times 1\ MMBtu/\ 10^6\ Btu)]$$

Where:
HI = heat input to the emissions unit (MMBtu)
VOLoil = amount of oil burned in the emissions unit (gallons)
HCoil = heat content of oil, Btu/gallon
VOLng = amount of natural gas burned in the emissions unit (standard cubic feet)
HCng = heat content of natural gas, Btu/scf; and

    vii. the rolling 12-month total heat input to emissions units EU S-1C, EU S-10, EU S-11, and EU S-15 (MMBtu).
E. The permittee shall maintain records required by its standard operating procedures.

Authority for Requirement: DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

NSPS Requirements

These emission units are subject to 40 CFR, Part 60, Subpart Dc, "Standards of Performance for small Industrial-Commercial-Institutional Steam Generating Units".

Authority for Requirement: 567 IAC 23.1(2)"lll", 40 CFR 60 Subpart Dc,
DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

Emission Point Characteristics
Each of these emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 46 feet
Stack Opening, (inches, dia.): 24 inches
Exhaust Flow Rate (scfm): 6543 scfm
Exhaust Temperature (^{o}F): 350 degrees
Discharge Style: Vertical, Obstructed
Authority for Requirement: DNR construction permit 01-A-843-S4,
DNR construction permit 01-A-844-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: S-13, S-14

Emission Point	Emission Unit	Emission Unit Description	Raw Material/Fuel	Rated Capacity	Construction Permit
S-13	S-13	2000 kW Emergency Generator	#2 Fuel Oil	140.2 gal/hr	05-A-276-S3
S-14	S-14	2000 kW Emergency Generator	#2 Fuel Oil	140.2 gal/hr	05-A-277-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each of these emission points shall not exceed the levels specified below.

Emission Point	Opacity 567 IAC 23.3(2)"d"	PM 567 IAC 23.3(2)"a"	PM10	Sulfur Dioxide	Nitrogen Oxides PSD synthetic minor	Carbon Monoxide PSD synthetic minor	Authority for Requirement
S-13	40%(1)	2.76 lb/hr 4.11 tpy(2)	2.76 lb/hr 4.11 tpy(2)	1.0 lb/hr	41.71 lb/hr 63.10 tpy(2) 0.30 lb/gal	16.69 lb/hr 24.98 tpy(2) 0.15 lb/gal	05-A-276-S3
S-14	40%(1)	2.76 lb/hr 4.11 tpy(2)	2.76 lb/hr 4.11 tpy(2)	1.0 lb/hr	41.71 lb/hr 63.10 tpy(2) 0.30 lb/gal	16.69 lb/hr 24.98 tpy(2) 0.15 lb/gal	05-A-277-S3

(1) An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is a 12-month rolling total, based on operating limits. The annual limit is a combined limit for emission units S-13, S-14, S-17, S-18, and S-19.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits for each of the two engines:

A. Emissions units S-13, S-14, S-17, S-18, and S-19 shall not burn more than 419,280 gallons of diesel fuel oil in any rolling 12-month period.
B. The engine shall combust only #1 or #2 diesel fuel oil. Prior to burning any other fuels, the permittee shall submit an application to the Iowa DNR - Air Quality Bureau to modify this permit.
C. The sulfur content of the oil burned in this unit shall not exceed 0.05 percent by weight. This limit applies at all times, including periods of startup, shutdown and malfunctions.

Reporting & Recordkeeping Requirements for each of the two engines:
The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.

A. The permittee shall perform an analysis and shall maintain records on the sulfur content of each shipment of oil received. Alternatively, the permittee shall have the oil supplier provide analyses on the sulfur content of the oil received.
B. The permittee shall keep the following monthly records:
    i. the total amount of diesel fuel oil burned in emissions units S-13, S-14, S-17, S-18, and S-19.
    ii. the rolling, 12-month total of the amount of diesel fuel oil burned in emissions unit S-13, S-14, S-17, S-18, and S-19.

Authority for Requirement: Iowa DNR construction permits: 05-A-276-S3 and 05-A-277-S3

Emission Point Characteristics
Each of these emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35 feet
Stack Opening, (inches, dia.): 16 inches
Exhaust Flow Rate (scfm): 5980 scfm
Exhaust Temperature (^{o}F): 958 degrees
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR construction permits: 05-A-276-S3 and 05-A-277-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: S-15

Emission Unit vented through this Emission Point: S-15
Emission Unit Description: Boiler #5
Raw Material/Fuel: Natural Gas, #2 Fuel Oil
Rated Capacity: 0.0045 mmcf/hr, 321.4 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity (Natural Gas)
Emission Limit(s): 40%(1)
Authority for Requirement: 567 IAC 23.3(2)"d", DNR construction Permit 06-A-113-S2

Pollutant: Opacity (#2 Fuel Oil)
Emission Limit(s): 20% as a 6 minute average(1), with one instance of not more than 27% over 6 minutes per hour.
Authority for Requirement: 567 IAC 23.1(2)"lll", DNR construction Permit 06-A-113-S2

Pollutant: Particulate Matter
Emission Limit(s): 1.41 lb/hr, 0.6 lb/MMBTU
Authority for Requirement: 567 IAC 23.3(2)"b", DNR construction Permit 06-A-113-S2

Pollutant: Particulate Matter < 10 Microns
Emission Limit(s): 0.99 lb/hr
Authority for Requirement: DNR construction Permit 06-A-113-S2

Pollutant: Sulfur Dioxide (Natural Gas)
Emission Limit(s): 0.0006 lb/MMBTU, 500 ppmv
Authority for Requirement: 567 IAC 23.1(2)"lll", 567 IAC 23.3(3)"e", DNR construction Permit 06-A-113-S2

Pollutant: Sulfur Dioxide (#2 Fuel Oil)
Emission Limit(s): 0.054 lb/MMBTU
Authority for Requirement: 567 IAC 23.1(2)"lll", DNR construction Permit 06-A-113-S2

Pollutant: Nitrogen Oxides (Natural Gas)
Emission Limit(s): 0.075 lb/MMBTU
Authority for Requirement: DNR construction Permit 06-A-113-S2

Pollutant: Nitrogen Oxides (#2 Fuel Oil)
Emission Limit(s): 0.158 lb/MMBTU
Authority for Requirement: DNR construction Permit 06-A-113-S2

Pollutant: Nitrogen Oxides
Emission Limit(s): 7.11 lb/hr
Authority for Requirement: DNR construction Permit 06-A-113-S2

Pollutant: Carbon Monoxide
Emission Limit(s): 0.084 lb/MMBTU
Authority for Requirement: DNR construction Permit 06-A-113-S2

(1) An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

A. This emission unit (Boiler #5) is limited to firing on natural gas and fuel oil #1 or #2. Prior to burning any other fuels, the permittee shall submit an application to the Iowa DNR - Air Quality Bureau to modify this permit.
B. The annual heat input to emission units EU S-1C, EU S-10, EU S-11, and EU S-15, combined, shall not exceed 600,000 MMBtu in any rolling 12-month period.
C. The total amount of fuel oil burned in emission units EU S-1C, EU S-10, EU S-11, and EU S-15, combined, shall not exceed 560,571 gallons in any rolling 12-month period.
D. The sulfur content of the oil burned in the emission unit shall not exceed 0.05 percent by weight. This limit applies at all times, including periods of startup, shutdown and malfunctions.
E. The owner or operator shall operate the emission unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected emission unit indicative of compliance with the opacity standard.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.

A. As specified in 40 CFR Part 60 §60.48c(g), the owner or operator of this boiler (Boiler #5) shall record and maintain records of the fuels combusted during each calendar month.
B. As specified in 40 CFR Part 60.48c(f), the owner or operator of this boiler (Boiler #5) shall retain fuel supplier certification of the sulfur content of the fuels fired in this boiler.
C. The owner or operator of this boiler (Boiler #1) shall retain fuel supplier certification of the heat content of the fuels fired in this boiler.
D. The owner or operator shall maintain the following monthly records:

i. the total amount of fuel oil burned in the emissions unit (gallons);
ii. the heat content of the fuel oil burned (Btu/gallons);
iii. the rolling 12-month total amount of fuel oil burned in the emissions unit (gallons);
iv. the rolling 12-month total amount of fuel oil burned in emissions units EU S-1C, EU S-10, EU S-11, and EU S-15;
v. the total amount of natural gas burned in the emissions unit (standard cubic feet)
vi. the heat input to the emissions unit ; the heat input shall be calculated by using the following equation:

HI = [(VOLoil x HCoil x 1 MMBtu/ 10^6 Btu) + (VOLng x HCng x 1 MMBtu/ 10^6 Btu)]

Where:
HI = heat input to the emissions unit (MMBtu)
VOLoil = amount of oil burned in the emissions unit (gallons)
HCoil = heat content of oil, Btu/gallon
VOLng = amount of natural gas burned in the emissions unit (standard cubic feet)
HCng = heat content of natural gas, Btu/scf; and

vii. the rolling 12-month total heat input to emissions units EU S-1C, EU S-10, EU S-11, and EU S-15 (MMBtu).

E. The permittee shall maintain records required by its standard operating procedures.

Authority for Requirement: DNR construction Permit 06-A-113-S2

NSPS Requirements

These emission units are subject to 40 CFR, Part 60, Subpart Dc, "Standards of Performance for small Industrial-Commercial-Institutional Steam Generating Units".

Authority for Requirement: 567 IAC 23.1(2)"lll", 40 CFR 60 Subpart Dc,
DNR construction permit 06-A-113-S2

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 45 feet
Stack Opening, (inches, dia.): 36 inches
Exhaust Flow Rate (scfm): 10,000 scfm
Exhaust Temperature (^{o}F): 400 degrees
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR construction Permit 06-A-113-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: S-16, S-16A (Bypass Stack)

Emission Unit vented through this Emission Point: S-16
Emission Unit Description: 3.5 MW Combustion Turbine with 21.9 MMBTU/hr HRSG
Raw Material/Fuel: Natural gas
Rated Capacity: Turbine: 45.72 MMBTU/hr
Max to HRSG #2 from turbine: 21.9 MMBTU/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from each of these emission points shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: 567 IAC 23.3(2)"d", DNR construction permit 06-A-1149-S2,
DNR construction permit 06-A-1308-S2

Pollutant: Particulate Matter
Emission Limit(s): 1.9 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a", DNR construction permit 06-A-1149-S2,
DNR construction permit 06-A-1308-S2

Pollutant: Particulate Matter <10 Microns
Emission Limit(s): 1.9 lb/hr
Authority for Requirement: DNR construction permit 06-A-1149-S2,
DNR construction permit 06-A-1308-S2

Pollutant: Sulfur Dioxide
Emission Limit(s): 2.74 lb/hr, 0.06 lb/MMBTU
Authority for Requirement: 567 IAC 23.1(2)"aaaa",
DNR construction permit 06-A-1149-S2
DNR construction permit 06-A-1308-S2

Pollutant: Nitrogen Oxides
Emission Limit(s): 6.9 lb/hr, 30.22 tpy(2), 42 ppm @ 15% O_2 or 2.3 lb/MWh
Authority for Requirement: 567 IAC 23.1(2)"aaaa",
DNR construction permit 06-A-1149-S2
DNR construction permit 06-A-1308-S2

Pollutant: Carbon Monoxide
Emission Limit(s): 5.0 lb/hr
Authority for Requirement: DNR construction permit 06-A-1149-S2
DNR construction permit 06-A-1308-S2

(1) An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Annual NOx emissions from EP S-16 and EP S-16A shall not exceed 30.22 tons in any rolling 12-month period.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

A. The exhaust gas from the turbine is passed through a heat recovery boiler. The boiler is not equipped with an auxiliary burner. The maximum heat input to the boiler is 21.9 MMBTU/hr.

B. The emissions unit is limited to burning natural gas only. The sulfur content of the natural gas must not exceed a limit of 20 grains of sulfur per 100 standard cubic feet of gas in order to not exceed the sulfur dioxide limit of 0.06 lb/MMBTU heat input.

C. In accordance with continuous compliance requirements of §60.4340, the permittee must conduct an annual performance test for NOx. If the NOx emission results from the performance test is less than or equal to 75 percent of the NOx emission limit for the unit, the permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, the permittee must resume annual performance tests.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.

A. In accordance with §60.4360 and §60.4365, the permittee is not required to monitor the total sulfur content of the natural gas being fired in the turbine provided that it can show that potential sulfur dioxide emissions do not exceed 0.06 lb/MMBTU heat input. One of the following sources of information must be used to demonstrate this:

   i. The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet and has potential sulfur dioxide emissions of less than 0.060 lb/ MMBTU heat input; or

   ii. Representative fuel sampling data which show that the sulfur content of the natural gas does not exceed 0.060 lb/MMBTU heat input. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR Part 75 is required.

B. In accordance with §60.4375(b), the permittee shall submit a written report to the Iowa DNR - Air Quality Bureau of the results of each NOx performance test no later than 60 days after the completion of the performance test.

Authority for Requirement: DNR construction permit 06-A-1149-S2
DNR construction permit 06-A-1308-S2

NSPS Requirements

This emission unit is subject to the requirements of 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (567 IAC 23.1(2)"aaaa"). The heat input to the turbine at peak load is 45.72 MMBTU/hr.

Authority for Requirement: 567 IAC 23.1(2)"aaaa", 40 CFR 60 Subpart KKKK,
DNR construction permit 06-A-1149-S2,
DNR construction permit 06-A-1308-S2

Emission Point Characteristics
These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 45 feet
Stack Opening, (inches, dia.): 41.5 inches (S-16)
40.75 inches (S-16a)
Exhaust Flow Rate (scfm): 36,458 scfm (S-16)
31,424 scfm (S-16a)
Exhaust Temperature (^{o}F): 341 degrees (S-16)
820 degrees (S-16a)
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR construction permit 06-A-1149-S2
DNR construction permit 06-A-1308-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - NOx
Stack Test to be Completed – Annually (1)
Test Method - 40 CFR 60, Appendix A, Method 7E
Authority for Requirement - DNR construction permit 06-A-1149-S2

(1) In accordance with § 60.4400, subsequent NOx performance tests shall be conducted on an annual basis, no more than 14 calendar months following the previous performance test. See also §63.4340(a) and Condition C of the Operating Limits section above for testing frequency.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: S-17 and S-18

Emission Point	Emission Unit	Emission Unit Description	Raw Material/Fuel	Rated Capacity	Construction Permit
S-17	S-17	2000 kW Emergency Generator	#2 Fuel Oil	140.2 gal/hr	06-A-1150-S2
S-18	S-18	2000 kW Emergency Generator	#2 Fuel Oil	140.2 gal/hr	06-A-1151-S2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each of these emission points shall not exceed the levels specified below.

Emission Point	Opacity 567 IAC 23.3(2)"d"	PM 567 IAC 23.3(2)"a"	PM10	Sulfur Dioxide	Nitrogen Oxides PSD synthetic minor	Carbon Monoxide PSD synthetic minor	Authority for Requirement
S-17	40%(1)	2.76 lb/hr 4.11 tpy(2)	2.76 lb/hr 4.11 tpy(2)	1.0 lb/hr	41.71 lb/hr 63.10 tpy(2) 0.30 lb/gal	16.69 lb/hr 24.98 tpy(2) 0.15 lb/gal	06-A-1150-S2
S-18	40%(1)	2.76 lb/hr 4.11 tpy(2)	2.76 lb/hr 4.11 tpy(2)	1.0 lb/hr	41.71 lb/hr 63.10 tpy(2) 0.30 lb/gal	16.69 lb/hr 24.98 tpy(2) 0.15 lb/gal	06-A-1151-S2

(1) An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is a 12-month rolling total, based on operating limits. The annual limit is a combined limit for emission units S-13, S-14, S-17, S-18, and S-19.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits for each of the two engines:

A. This engine is limited to burning diesel fuel oil only.
B. Emissions units S-13, S-14, S-17, S-18 and S-19 shall not burn more than 419,280 gallons of diesel fuel oil in any rolling 12-month period.
C. This engine is limited to operating for emergency situations and required testing and maintenance. In accordance with §60.4211(e), the engine is limited to operating a maximum of 100 hours per year for maintenance checks and readiness testing. This engine is not allowed to operate as a peak shaving unit.

D. In accordance with §60.4207(b), the diesel fuel oil burned in this engine shall meet the following specifications from 40 CFR 80.510(b) for nonroad diesel fuel:
    i. a maximum sulfur content of 15 ppm (0.0015%) by weight; and
    ii. a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume.

    Note: Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted (40 CFR 60.4207(b)).

E. In accordance with §60.4209(a), the engine shall be equipped with a non-resettable hour meter.
F. In accordance with §60.4211(a), this engine shall be operated and maintained in accordance with the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the manufacturer. The owner or operator may only change engine settings that are permitted by the manufacturer.

Reporting & Recordkeeping Requirements for each of the two engines:
The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.
A. The owner or operator shall maintain the following monthly records:
    i. the total number of hours that the engine operated;
    ii. the number of hours that the engine operated for maintenance checks and readiness testing; and
    iii. the rolling 12-month total amount of the number of hours that the engine operated.
    iv. the total amount of diesel fuel oil burned in emissions units S-13, S-14, S-17, S-18, and S-19, and
    v. the rolling, 12-month total of the amount of diesel fuel oil burned in emissions unit S-13, S-14, S-17, S-18, and S-19.
B. The owner or operator shall maintain an annual record of the number of hours that the engine operated for maintenance checks and readiness testing.
C. The owner or operator of the engine shall keep any records required to demonstrate compliance with the emission standards in §60.4205 (a), as required by §60.4211 (b).
D. The owner or operator of the engine shall comply with the requirements of condition (D) of the Operation Limits listed above by one of the following methods:
    i. have the fuel supplier certify that the fuel delivered meets the definition of non-road diesel fuel as defined in 40 CFR 80.510(b);
    ii. obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or
    iii. perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.

Authority for Requirement: Iowa DNR construction permits: 06-A-1150-S2 and 06-A-1151-S2.

NSPS and NESHAP Requirements for each of the two engines

A. This engine is subject to 40 CFR Part 60 NSPS Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (IAC 23.1(2)"yyy"). The engine is an emergency stationary internal combustion engine that is not a fire pump engine.
   i. This engine must comply with the emissions standards from §60.4205 (a). The emission standards that the engine must meet are:

Pollutant	Emission Standard	Authority for Requirement
Particulate Matter (PM)	0.54 grams/kW-hr	40 CFR Part 60 NSPS Subpart IIII, Table 1
HC[1]	1.3 grams/kW-hr	
NOx	9.2grams/kW-hr	
Carbon Monoxide (CO)	11.4 grams/kW-hr	

[1] Hydrocarbons

   ii. This engine must demonstrate compliance according to one of the methods specified in §60.4211 (b).

B. This engine is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (567 IAC 23.1(4)"cz", 40 CFR Part 63, Subpart ZZZZ). The engine is a new reciprocating internal combustion engine (RICE). In accordance with §63.6590 (c), the engine must comply with the requirements of Subpart ZZZZ by meeting the requirements of NSPS subpart IIII.

Authority for Requirement: 567 IAC 23.1(2)"yyy", 40 CFR 60 Subpart IIII,
567 IAC 23.1(4)"cz", 40 CFR 63, Subpart ZZZZ,
DNR construction permits: 06-A-1150-S2 and 06-A-1151-S2

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35 feet
Stack Opening, (inches, dia.): 16 inches
Exhaust Flow Rate (scfm): 5980 scfm
Exhaust Temperature (^{o}F): 958 degrees
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR construction permits: 06-A-1150-S2 and 06-A-1151-S2.

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: S-19

Emission Unit vented through this Emission Point: S-19
Emission Unit Description: 2000 kW Emergency Generator
Raw Material/Fuel: Fuel Oil
Rated Capacity: 138.90 gallons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from each of these emission points shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: 567 IAC 23.3(2)"d", 567 IAC 23.1(2)"yyy",
DNR construction permit 11-A-091

Pollutant: Particulate Matter
Emission Limit(s): 2.76 lb/hr, 4.11 tons/yr(2)
Authority for Requirement: 567 IAC 23.3(2)"a", 567 IAC 23.1(2)"yyy",
DNR construction permit 11-A-091

Pollutant: Particulate Matter <10 Microns
Emission Limit(s): 2.76 lb/hr, 4.11 tons/yr(2)
Authority for Requirement: DNR construction permit 11-A-091

Pollutant: Nitrogen Oxides
Emission Limit(s): 41.71 lb/hr, 63.10 tons/yr(2), 0.30 lb/gal
Authority for Requirement: DNR construction permit 11-A-091

Pollutant: Carbon Monoxide
Emission Limit(s): 16.69 lb/hr, 24.98 tons/yr(2), 0.15 lb/gal
Authority for Requirement: DNR construction permit 11-A-091

(1) An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is a 12-month rolling total, based on operating limits. The annual limit is a combined limit for emission units S-13, S-14, S-17, S-18, and S-19.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

A. This engine is limited to burning diesel fuel oil only.
B. Emissions units S-13, S-14, S-17, S-18 and S-19 shall not burn more than 419,280 gallons of diesel fuel oil in any rolling 12-month period.
C. This engine is limited to operating for emergency situations and required testing and maintenance. In accordance with §60.4211(e), the engine is limited to operating a maximum of 100 hours per year for maintenance checks and readiness testing. This engine is not allowed to operate as a peak shaving unit.
D. In accordance with §60.4207(b), the diesel fuel oil burned in this engine shall meet the following specifications from 40 CFR 80.510(b) for nonroad diesel fuel:
    i. a maximum sulfur content of 15 ppm (0.0015%) by weight; and
    ii. a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume.

    Note: Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, <u>except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted</u> (40 CFR 60.4207(b)).

E. In accordance with §60.4209(a), the engine shall be equipped with a non-resettable hour meter.
F. In accordance with §60.4211(a), this engine shall be operated and maintained in accordance with the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the manufacturer. The owner or operator may only change engine settings that are permitted by the manufacturer.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.

A. The owner or operator shall maintain the following monthly records:
    i. the total number of hours that the engine operated;
    ii. the number of hours that the engine operated for maintenance checks and readiness testing; and
    iii. the rolling 12-month total amount of the number of hours that the engine operated.
    iv. the total amount of diesel fuel oil burned in emissions units S-13, S-14, S-17, S-18, and S-19, and
    v. the rolling, 12-month total of the amount of diesel fuel oil burned in emissions unit S-13, S-14, S-17, S-18, and S-19.
B. The owner or operator shall maintain an annual record of the number of hours that the engine operated for maintenance checks and readiness testing.
C. The owner or operator of the engine shall comply with the requirements of condition (D) of

the Operation Limits section listed above by one of the following methods:

i. have the fuel supplier certify that the fuel delivered meets the definition of non-road diesel fuel as defined in 40 CFR 80.510(b);
ii. obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or
iii. perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.

Authority for Requirement: DNR construction permit 11-A-091

NSPS and NESHAP Requirements

A. This engine is subject to 40 CFR Part 60 NSPS Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (IAC 23.1(2)"yyy"). The engine is an emergency stationary internal combustion engine that is not a fire pump engine.

i. In accordance with §60.4211(c), the engine must be certified by its manufacturer to comply with the emissions standards from §60.4205 (b) and §60.4202 (a)(2). The emission standards that the engine must be certified by the manufacturer to meet are:

Pollutant	**Emission Standard**	**Authority for Requirements**
Particulate Matter (PM)	0.20 grams/kW-hr	§ 89.112 Table 1
NMHC[1] + NOx	6.4 grams/kW-hr	§ 89.112 Table 1
Carbon Monoxide (CO)	3.5 grams/kW-hr	§ 89.112 Table 1
Opacity – acceleration mode	20%	§ 89.113 (a)(1)
Opacity – lugging mode	15%	§ 89.113 (a)(2)
Opacity – peaks in acceleration or lugging mode	50%	§ 89.113 (a)(3)

[1] Non-methane hydrocarbon

ii. In accordance with §60.4211(c), the owner or operator must comply with the required NSPS emissions standards by purchasing an engine certified by its manufacturer to meet the applicable emission standards for the same model year and engine power. The engine must be installed and configured to the manufacturer's specifications. Provided these requirements are satisfied, no further demonstration of compliance with the emission standards from §60.4205 (b) and §60.4202 (a)(2) is required.

B. This engine is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (567 IAC 23.1(4)"cz", 40 CFR Part 63, Subpart ZZZZ). The engine is a new reciprocating internal combustion engine (RICE). In accordance with §63.6590 (c), the engine must comply with the requirements of Subpart ZZZZ by meeting the requirements of NSPS subpart IIII.

Authority for Requirement: 567 IAC 23.1(2)"yyy", 40 CFR 60 Subpart IIII,
567 IAC 23.1(4)"cz", 40 CFR 63, Subpart ZZZZ,
DNR construction permit: 11-A-091

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35 feet
Stack Opening, (inches, dia.): 16 inches
Exhaust Flow Rate (scfm): 6690 scfm
Exhaust Temperature (^{o}F): 752 degrees
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR construction permit: 11-A-091.

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	**Yes** ☐ **No** ☒
Facility Maintained Operation & Maintenance Plan Required?	**Yes** ☐ **No** ☒
Compliance Assurance Monitoring (CAM) Plan Required?	**Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 6K GT

Emission Unit vented through this Emission Point: 6K GT
Emission Unit Description: 6,000 Gallon Gasoline Storage Tank
Raw Material/Fuel: Gasoline
Rated Capacity: Less than 10,000 gallons/month

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from these emission points shall not exceed the levels specified below.

None at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The monthly throughput for this tank will not exceed 10,000 gallons of gasoline.

Authority for Requirement: 567 IAC 22.108(14)

Reports and Recordkeeping:
The owner or operator shall keep copies of the following records on site for at least five years. These records shall be available for inspection by the Department.

1. The annual throughput for this tank, calculated as a rolling 12-month total.

Authority for Requirement: 567 IAC 22.108(3)

NESHAP Subpart CCCCCC Requirements

A. The owner/operator of this equipment shall comply with the requirements of 40 CFR §63.11115 and 40 CFR §63.11116.
B. The owner or operator shall meet the applicable recordkeeping and reporting standards of 40 CFR §63.11125(d) and 40 CFR §63.11126(b).
C. The owner or operator shall meet the applicable notification requirements in accordance with 40 CFR §63.11124.

Authority for Requirement: 40 CFR 63 Subpart CCCCCC
567 IAC 23.1(4)"ec"

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 22.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Windsor Heights, Iowa 50324, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permits, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
    a. Form 1.0 "Facility Identification";
    b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
    c. Form 5.0 "Title V annual emissions summary/fee"; and
    d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
    a. Form 1.0 "Facility Identification";
    b. Form 5.0 "Title V annual emissions summary/fee";
    c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.

6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:
1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:
1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
    a. The date, place and time of sampling or measurements
    b. The date the analyses were performed.
    c. The company or entity that performed the analyses.
    d. The analytical techniques or methods used.
    e. The results of such analyses; and
    f. The operating conditions as existing at the time of sampling or measurement.
    g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.

b. Maintain a log at the permitted facility of the scenario under which it is operating.

c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.
1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;

b. Compliance test methods specified in 567 Chapter 25; or

c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

a. Any monitoring or testing methods provided in these rules; or

b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department

within seven days of the onset of the upset condition, and shall include as a minimum the following:

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The facility at the time was being properly operated;

c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and

d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of

performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);

c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));.

e. The changes comply with all applicable requirements.

f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,

ii. The date on which the change will occur,

iii. Any change in emission as a result of that change,

iv. The pollutants emitted subject to the emissions trade

v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that does any of the following:

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:

i. Do not violate any applicable requirement;

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;

iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

ii. The permittee's suggested draft permit;

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.111-567 IAC 22.113*

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (*567 IAC 23.1(3)"a");* training fires and controlled burning of a demolished building *(567 IAC 23.2).*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. *567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
    a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
    b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
    c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
    d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
    a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
    b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
    c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
    d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
    e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
    f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air

conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the

permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

a. Such applicable requirements are included and are specifically identified in the permit; or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 22.111(1). *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(515) 725-9545

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
U.S. EPA Region 7
Air Permits and Compliance Branch
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(515) 725-9500

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
7900 Hickman Road, Suite #200
Windsor Heights, IA 50324
(515) 725-0268

Field Office 6
1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Works Dept.
Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health
Air Quality Branch
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

V. Appendix A: NSPS and NESHAP

NSPS

A. 40 CFR 60 Subpart A – General Provisions
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.a
B. 40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
C. http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.d_0c
D. 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.gg
E. 40 CFR 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.kkkk
F. 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.iiii

NESHAP

G. 40 CFR 63 Subpart A – General Provisions
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.10.63.a
H. 40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.14.63.zzzz
I. 40 CFR 63 Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.15.63.cccccc